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Regenerative heat exchanger

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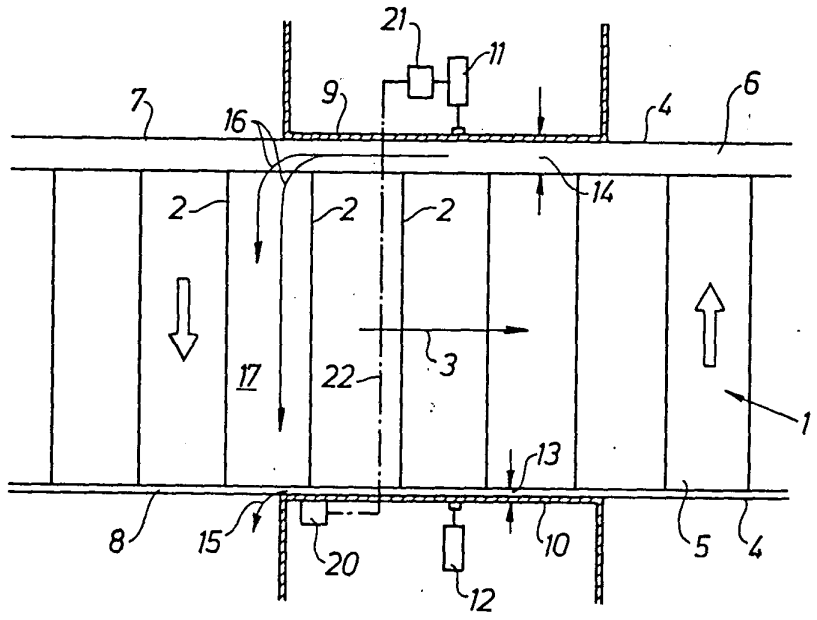
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CLAIMS

1. Rotary regenerative heat exchanger for gaseous media comprising a rotor having a plurality of sector-like compartments carrying regenerative heat exchange material, a stationary structure comprising a casing for said rotor and end plates having inlet and outlet openings separated by adjustable sector plates providing two passages through said heat exchanger between said openings for flow in countercurrent direction of a primary gaseous medium to be heated and a secondary gaseous medium to be cooled of different pressure than said primary medium, respectively, and means for at least reducing leakage of the gaseous medium having the lower pressure, trapped in the sector-like compartments, to the gaseous medium having the higher pressure, in which there is an axial clearance between the sector plate positioned between the inlet opening of the low pressure medium and the outlet opening of the high pressure medium and the corresponding end of the rotor, the said clearance forming a passage from said outlet opening of the high pressure medium, and in which there are means for adjusting said sector plate to such an axial clearance that an intentional amount of direct leakage of the high pressure medium from the outlet opening of the high pressure medium is maintained between the rotor end and said adjustable sector plate so as to result in the forcing out of the low pressure medium from each compartment that is about to leave the low pressure medium passage and the replacing of it with high pressure medium.

2. Rotary regenerative heat exchanger as claimed in claim1, having a low pressure medium tracing device adapted to trace presence or absence, respectively, of the low pressure medium and positioned close to the outlet opening of the low pressure medium flow and the portion of the sector plate where the sector-like compartments move towards the high pressure medium flow, the sector plate adjusting means being controlled by said low pressure medium tracing device such that said clearance is increased when the presence of said low pressure medium is indicated, and decreased when there is no indication of low pressure medium.

3. Rotary regenerative heat exchanger constructed and arranged sustantially as herein described with reference to the accompanying drawing.